

Claim Amendments

Please amend claims 1, 13, 27 and 34 as follows:

1. (currently amended) A method for receiving a packet stream at a client, comprising:

receiving from a server pre-decoder buffering parameters to ensure that the client is able to play out the packet stream without buffer violation [[when]] assuming the packet stream is transmitted over a constant delay, reliable transmission channel;

estimating in the client packet stream transfer delay variation indicative of a variation in time for transferring of the packet stream from the server to the client;

estimating parameters of a jitter buffer based on the packet stream transfer delay variation; and

transmitting to the server information indicative of an aggregate of the pre-decoder buffering parameters received from the server and the parameters of the jitter buffer estimated in the client.

2. (previously presented) A method according to claim 1, wherein the pre-decoder buffering parameters received are chosen based on variable bit-rate characteristics of the transmitted packet stream and the buffering applied by the server.

3. (canceled)

4. (previously presented) A method according to claim 1, wherein the information indicative of the aggregate buffering parameters is transmitted to the server at beginning of a new streaming session.

5. (previously presented) A method according to claim 1, further comprising:

determining parameters of the jitter buffer based on the estimated packet stream transfer delay variation during a streaming session; and

transmitting an aggregate of the pre-decoder buffering parameters and the changed jitter buffer during the streaming session.

6. (canceled)

7. (previously presented) A method according to claim 1, wherein the streaming server is adapted to optionally consider the information indicative of the client's chosen pre-decoder buffering parameters in rate control and/ or rate shaping.

8. (previously presented) A method according to claim 1, wherein the aggregate buffering parameters includes at least one of the following:

- information regarding a size of the client's pre-decoder buffer,
- information regarding a pre-decoder buffering period, and
- information regarding a post-decoder buffering time.

9. (previously presented) A method according to claim 1, wherein the aggregate buffering parameters is transmitted to the server in a Real-Time Streaming Protocol (RTSP) request message.

10. (previously presented) A method according to claim 9, wherein the aggregate buffering parameters is provided to the server in an RTSP PLAY request message.

11. (previously presented) A method according to claim 9, wherein the aggregate buffering parameters is provided to the server in an RTSP PING request message.

12. (canceled).

13. (currently amended) A streaming client, comprising:

- a pre-decoder buffer for storing a packet stream from a server;
- a media decoder for decoding the packet stream;
- a buffer controller for estimating packet stream transfer delay variation indicative of a variation in time for transferring of the packet stream from the server to the client and for estimating parameters of a jitter buffer based on ~~the~~ packet stream transfer delay variation; and
- a signaling engine for receiving from the server pre-decoder buffer parameters to ensure that the client is able to play out the packet stream without buffer violation [[when]] assuming the packet stream is transmitted over a constant delay, reliable transmission channel, and for providing to the server information indicative of an aggregate of the pre-decoder buffering parameters received from the server and the parameters of the jitter buffer to the server.

14. (canceled)

15. (previously presented) A streaming client according to claim 13, further comprising a post-decoder buffer for storing media data after decoding.

16. (previously presented) A streaming client according to claim 13, wherein the pre-decoder buffer and the jitter buffer are implemented as a single buffer unit.

17. (previously presented) A streaming client according to claim 15, wherein the pre-decoder buffer and the jitter buffer are implemented as a single buffer unit.

18. (canceled)

19. (canceled)

20. (previously presented) A streaming client according to claim 13, wherein the information indicative aggregate buffering parameters is provided to the server at beginning of a new streaming session.

21. (previously presented) A streaming client according to claim 13, wherein the signaling engine is further adapted to provide the aggregate of the pre-decoder buffering parameters and the changed jitter buffer during a streaming session.

22. (previously presented) A streaming client according to claim 13, wherein the information indicative of the aggregate buffering parameters includes at least one of the following:

- information regarding a size of the client's pre-decoder buffer,
- information regarding a pre-decoder buffering period, and
- information regarding a post-decoder buffering time.

23. (previously presented) A streaming client according to claim 13, wherein the information indicative of the aggregate buffering parameters is provided to the server in a Real-Time Streaming Protocol (RTSP) request message.

24. (previously presented) A streaming client according to claim 23, wherein the information indicative of the aggregate buffering parameters is provided to the server in an RTSP PLAY request message.

25. (previously presented) A streaming client according to claim 23, wherein the information indicative of the aggregate buffering parameters is provided to the server in an RTSP PING request message.

26. (canceled)

27. (currently amended) A streaming server for transmitting a packet stream to a client device, said streaming server comprising:

a signaling engine for transmitting providing to the client device pre-decoder buffer parameters to ensure the client is able to play out the packet stream without buffer violation [[when]] assuming the packet stream is transmitted over a constant delay, reliable transmission channel; and for receiving information indicative of an aggregate of the client's pre-decoder buffering parameters provided to the client device and parameters of a jitter buffer estimated in the client device, wherein parameters of the jitter buffer is estimated based on estimated packet stream transfer delay variation indicative of a variation in time for transferring of the packet stream from the server to the client; and

a rate controller adapted to adjust a rate at which media data is transmitted from the server in accordance with the aggregate buffering parameters.

28. (canceled)

29. (canceled)

30. (canceled)

31. (previously presented) A streaming server according to claim 27, wherein the information indicative of the aggregate buffering parameters received by the server includes at least one of the following:

information regarding a size of the client's pre-decoder buffer,
information regarding a pre-decoder buffering period, and
information regarding a post-decoder buffering time.

32. (canceled)

33. (previously presented) A streaming server according to claim 27, wherein the information indicative of the aggregate buffering parameters is received during a streaming session; and the rate controller is adapted to re-adjust the rate at which media data is transmitted from the server in accordance with the changed aggregate buffering parameters.

34. (currently amended) A method for transmitting a packet stream to a client comprising:

~~transmitting providing~~ to the client pre-decoder buffering parameters to ensure the client is able to play out the packet stream without buffer violation [[when]] ~~assuming~~ the packet stream is transmitted over a constant-delay, reliable transmission channel;

receiving information indicative of an aggregate of the client's ~~pre-decoder~~ buffering parameters ~~provided to the client and parameters of a jitter buffer estimated in the client~~, wherein parameters of the jitter buffer is estimated based on estimated packet stream transfer delay variation indicative of a variation in time for transferring of the packet stream from the server to the client; and

adjusting a rate at which media data is transmitted in accordance with the aggregate buffering parameters.

35. (previously presented) A method according to claim 34, wherein the information indicative of the aggregate buffering parameters received by the server includes at least one of the following:

information regarding a size of the client's pre-decoder buffer,
information regarding a pre-decoder buffering period, and
information regarding a post-decoder buffering time.

36. (canceled)

37. (previously presented) A method according to claim 34, wherein the information indicative of the aggregate buffering parameters is received during a streaming session; the method further comprising:

re-adjusting the rate at which media data is transmitted in accordance with a changed aggregate buffering parameters.